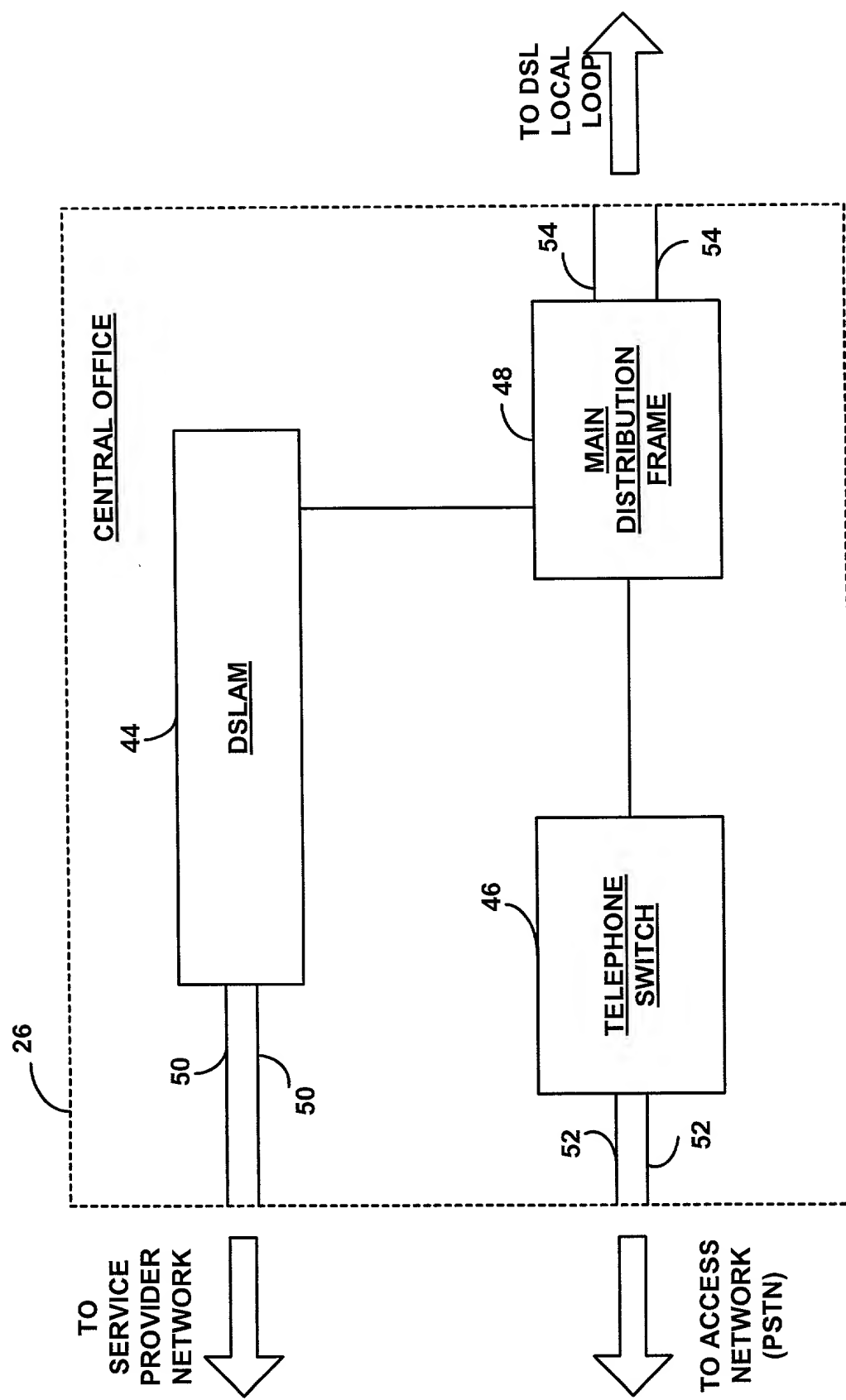


FIG. 1



**FIG. 2**

44 ↗

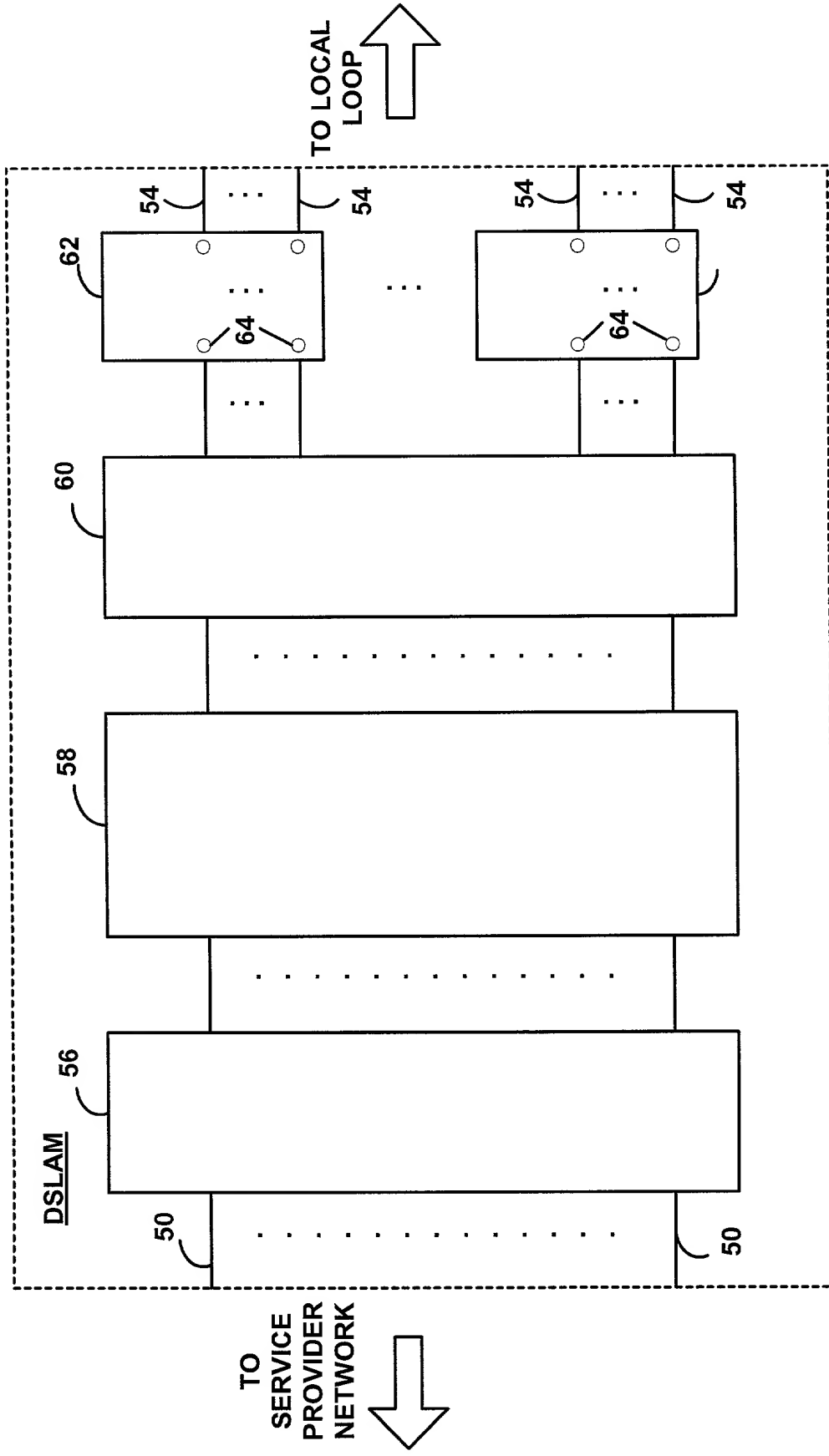
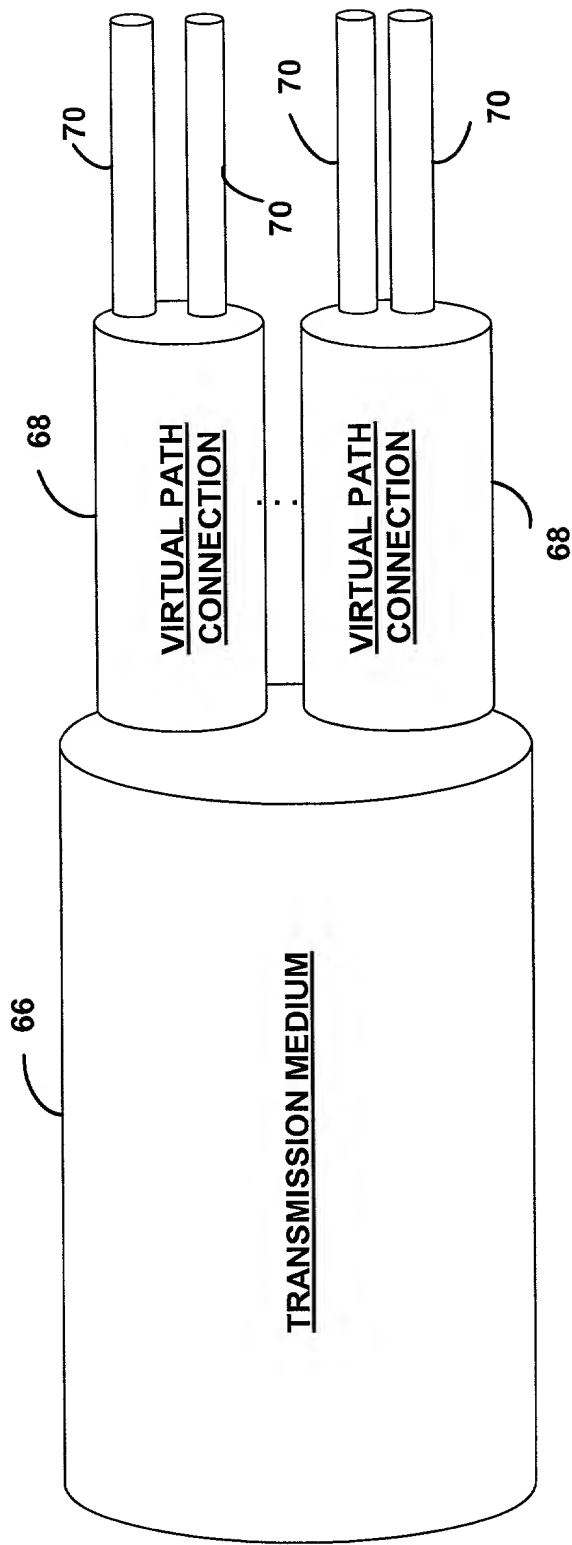


FIG. 3



**FIG. 4**

FIG. 5

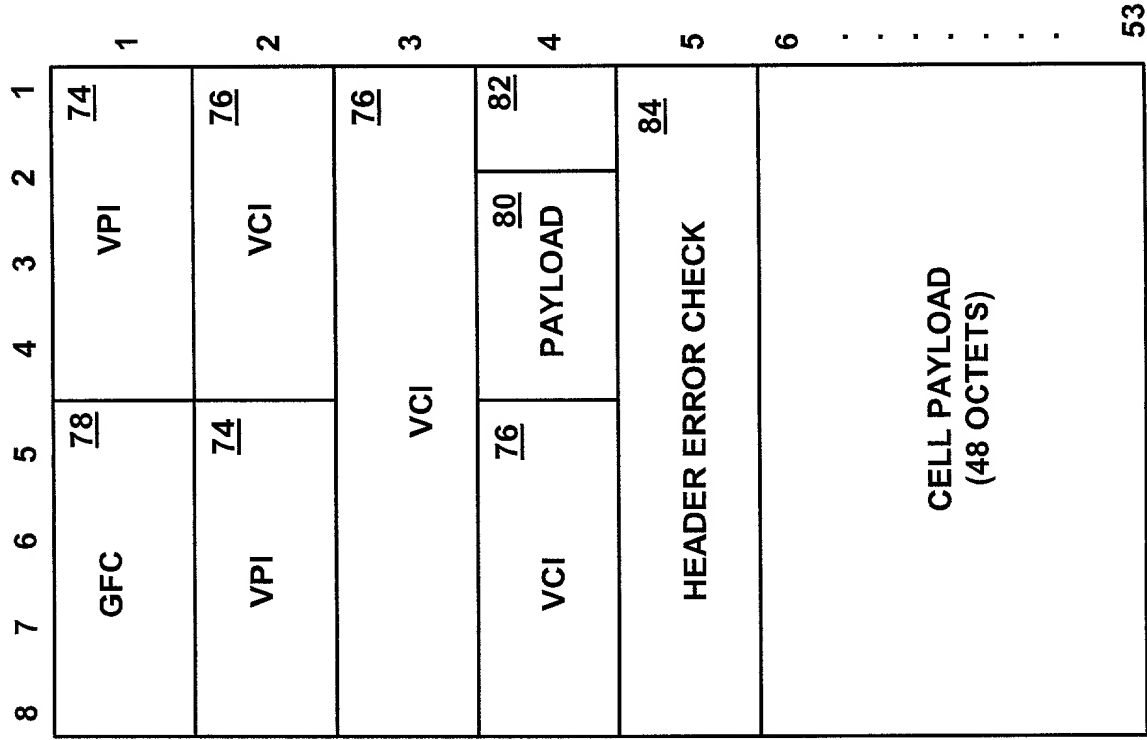


FIG. 5

FIG. 6

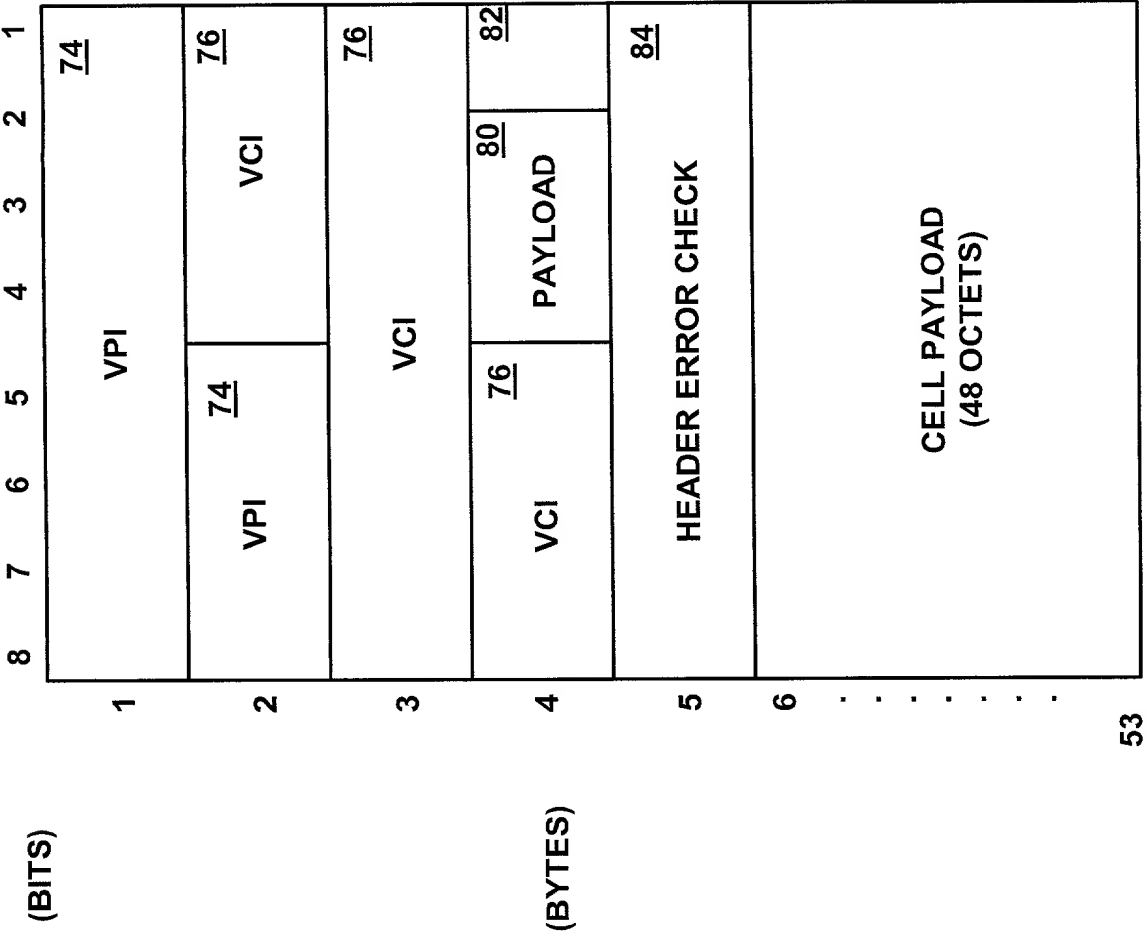


FIG. 6

FIG. 7 is a block diagram of a switch concentration module (SCM) 58. The SCM 58 includes a CPU 86, a local interface 90, a user interface 92, an uplink interface 56, and a backplane interface 60. The CPU 86 is connected to the local interface 90. The local interface 90 is connected to the user interface 92, the uplink interface 56, and the backplane interface 60. The local interface 90 is also connected to a management software block 100, which is connected to a memory block 100. The management software block 100 is connected to the local interface 90. The local interface 90 is connected to the user interface 92, the uplink interface 56, and the backplane interface 60. The local interface 90 is connected to the user interface 92, the uplink interface 56, and the backplane interface 60.

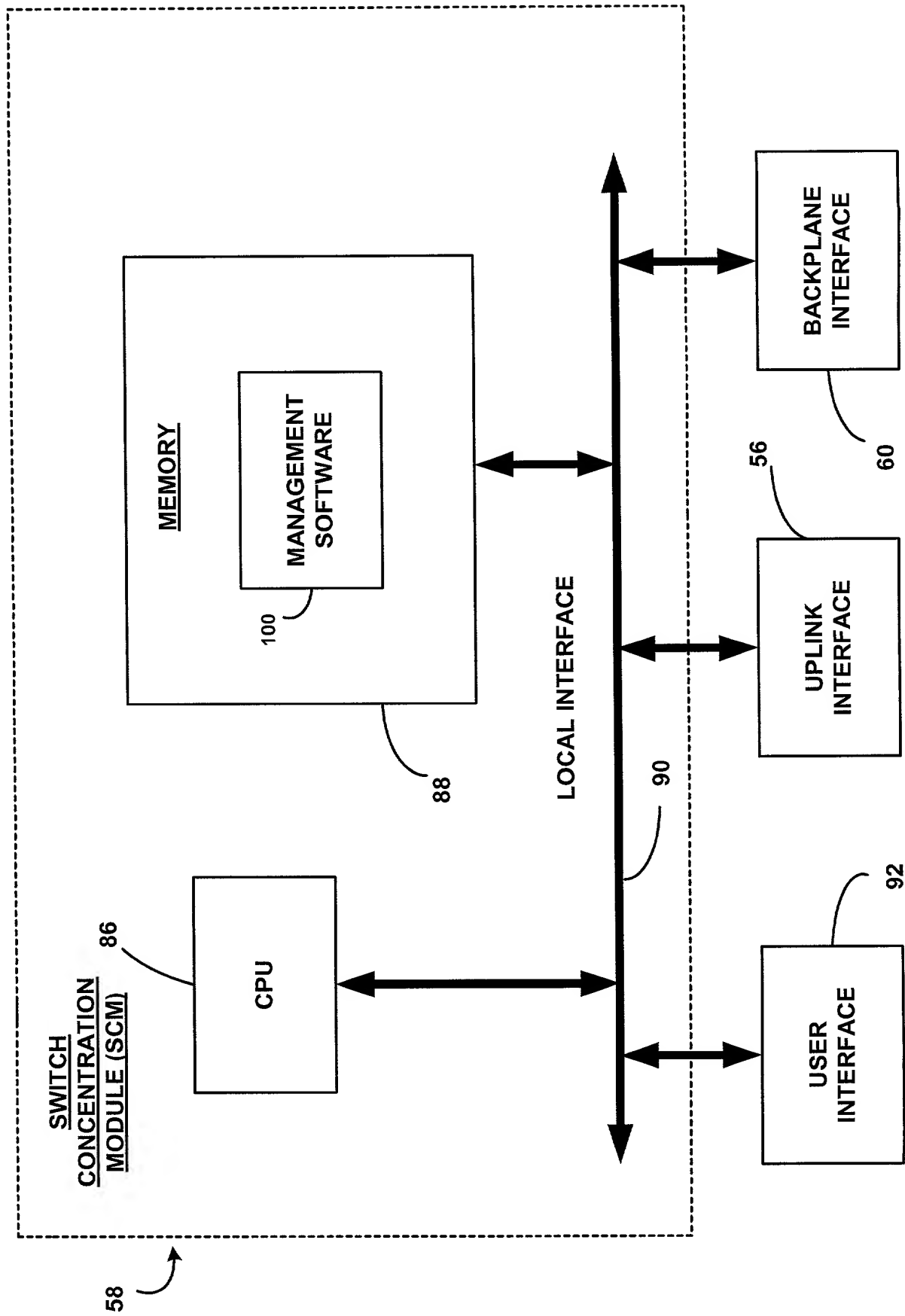
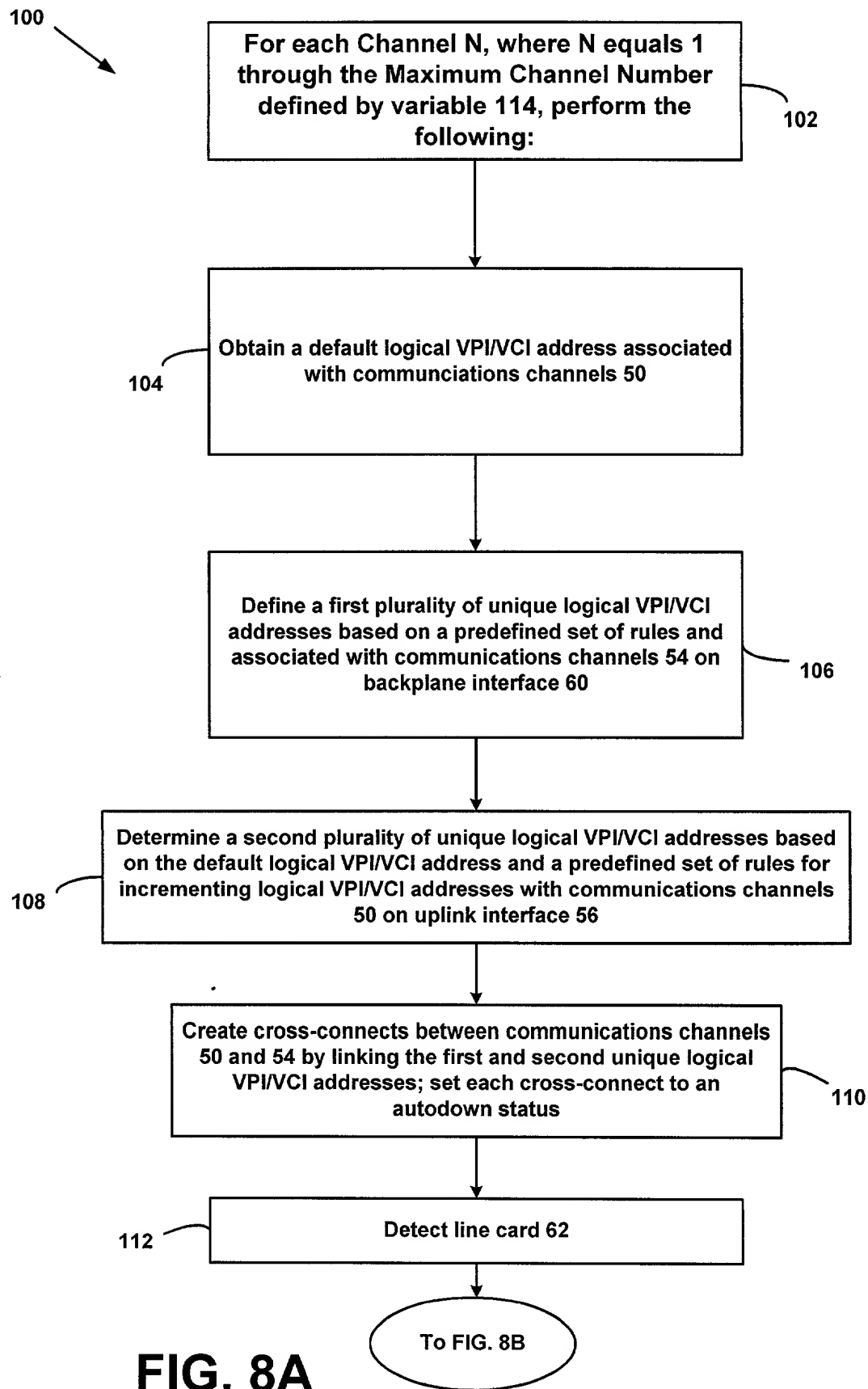
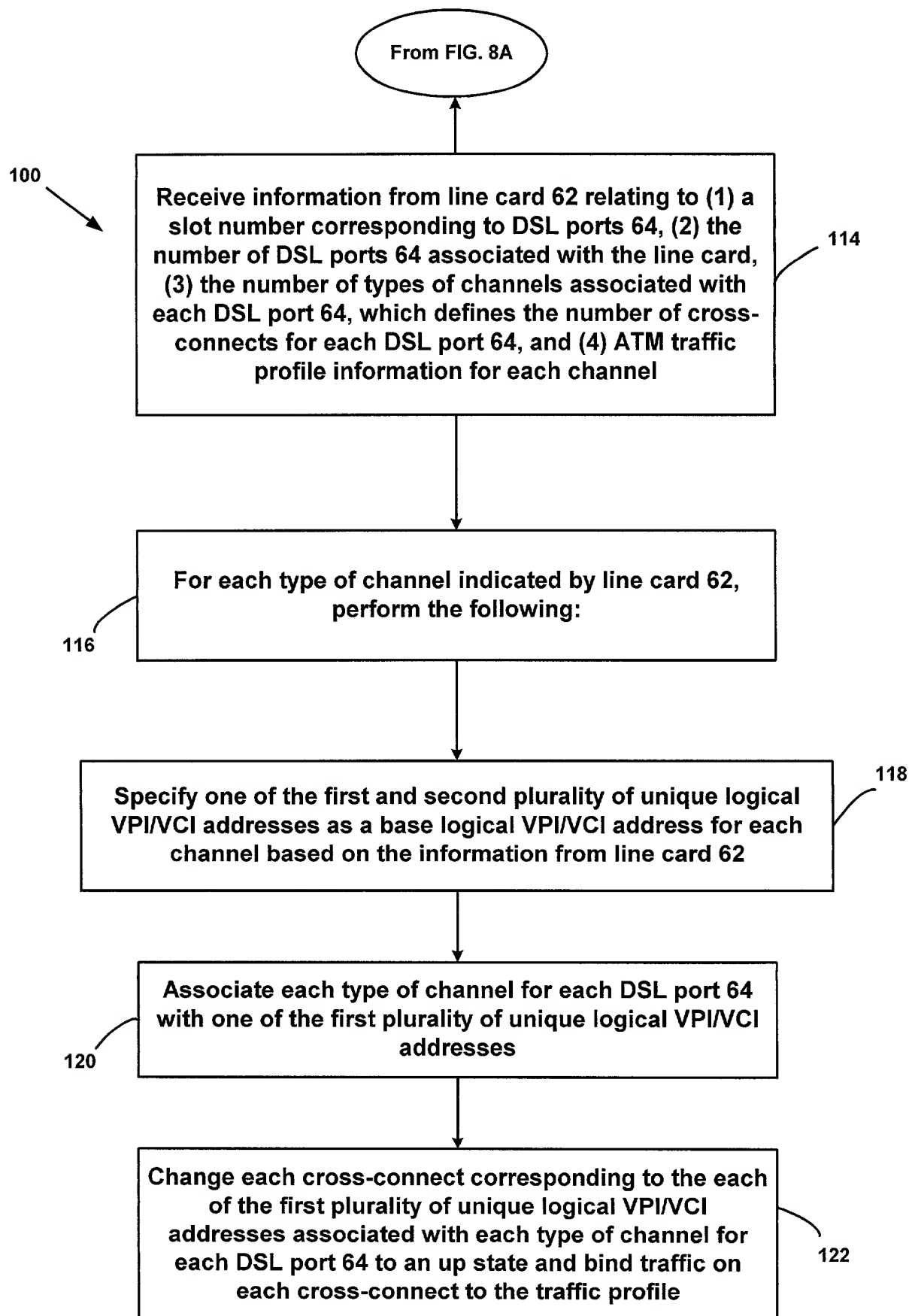


FIG. 7



**FIG. 8A**



**FIG. 8B**



<u>144</u>	<b>LINE CARD VARIABLE</b>	<b>VALUE</b>
<u>146</u>	<b>SLOT #</b>	
<u>148</u>	<b>NUMBER OF PORTS</b>	
<u>150</u>	<b>REQUESTED NUMBER OF CHANNELS PER PORT</b>	
<u>152</u>	<b>REQUESTED TRAFFIC PROFILE INDICATOR PER CHANNEL</b>	

**FIG. 9**

<u>154</u>	<b>DSL PORT VARIABLE</b>	<b>VALUE</b>
<u>154</u>	<b>DSL PORT #</b>	
<u>156</u>	<b>MAX VPI</b>	
<u>158</u>	<b>MAX VCI</b>	
<u>160</u>	<b>STATUS</b>	
<u>162</u>	<b>CONFIGURATION PARAMETERS (# channels, ATM parameters, upstream and downstream rate table, etc.)</b>	

**FIG. 10**

<u>166</u>	<b>BACKPLANE INTERFACE VARIABLE</b>	<b>VALUE</b>
<u>168</u>	<b>INTERFACE ID</b>	
<u>170</u>	<b>MAX VPI</b>	
<u>172</u>	<b>MAX VCI</b>	
<u>174</u>	<b>STATUS</b>	
<u>176</u>	<b>OTHER PARAMETERS</b>	

**FIG. 11**

<u>178</u>	<b>UPLINK INTERFACE VARIABLE</b>	<b>VALUE</b>
<u>180</u>	<b>INTERFACE ID</b>	
<u>182</u>	<b>MAX VPI</b>	
<u>184</u>	<b>MAX VCI</b>	
<u>186</u>	<b>STATUS</b>	
<u>188</u>	<b>OTHER PARAMETERS</b>	

**FIG. 12**

<u>190</u>	CROSS-CONNECT VARIABLE	VALUE
<u>192</u>	CROSS CONNECT ID	
<u>194</u>	IFINDEX1	
<u>196</u>	VPI1	
<u>200</u>	VC1	
<u>202</u>	IFINDEX2	
<u>204</u>	VPI2	
<u>206</u>	VC12	

**FIG. 13**

CROSS-CONNECTION TABLE		
<u>210</u>		
<u>212</u>	<u>216</u> <u>STATUS</u>	<u>214</u> <u>BACKPLANE INTERFACE:VPI:VCI</u> [IF1 ≤ BACKPLANE INTERFACE ≤ IFc] [VPI0 = fixed starting VPI] [VCI0 fixed starting VCI] [p = number of ports per card] [c = number of cards in system]
	IFup:VPI0:VCI0	IF1:VPI0:VCI0
	IFup:VPI0:VCI0+1	IF1:VPI0+1:VCI0
	IFup:VPI0:VCI0+p-2	IF1:VPI0+p-2:VCI0
	IFup:VPI0:VCI0+p-1	IF1:VPI0+p-1:VCI0
	IFup:VPI0:VCI0+p	IF2:VPI0/ VCI0
	IFup:VPI0:VCI0+p+1	IF2:VPI0+1:VCI0
	IFup:VPI0:VCI0+p*2-2	IF2:VPI0+p-2:VCI0
	IFup:VPI0:VCI0+p*2-1	IF2:VPI0+p-1:VCI0
	IFup:VPI0:VCI0+p*(c-2)	IF2:VPI0/ VCI0
	IFup:VPI0:VCI0+p*(c-2)+1	IF2:VPI0+1:VCI0

FIG. 14A

## CROSS-CONNECTION TABLE

210	
212	214
<u>UPLINK INTERFACE:VPI:VCI</u> [UPLINK INTERFACE = Ifup = 1] [VPI0 ≤ VPI ≤ VPI <sub>lm</sub> ] [VCI0 ≤ VCI ≤ VCI <sub>lm</sub> ] [p = number of ports per card] [c = number of cards in system]	<u>BACKPLANE INTERFACE:VPI:VCI</u> [IF1 ≤ BACKPLANE INTERFACE ≤ IFc] [VPI0 = fixed starting VPI] [VCI0 fixed starting VCI] [p = number of ports per card] [c = number of cards in system]
IFup:VPI0:VCI0+p*(c-1)-2	IFc:VPI0+p-2:VCI0
IFup:VPI0:VCI0+p*(c-1)-1	IFc:VPI0+p-1:VCI0
IFup:VPI1:VCI1	IF1:VPI0:VCI1
IFup:VPI1:VCI1+1	IF1:VPI0+1:VCI1
IFup:VPI1:VCI1+p-2	IF1:VPI0+p-2:VCI1
IFup:VPI1:VCI1+p-1	IF1:VPI0+p-1:VCI1
IFup:VPI1:VCI1+p	IF2:VPI0/ VCI1
IFup:VPI1:VCI1+p+1	IF2:VPI0+1:VCI1
IFup:VPI1:VCI1+p*(c-2)	IF2:VPI0/ VCI1
IFup:VPI1:VCI1+p*(c-2)+1	IF2:VPI0+1:VCI1

**FIG. 14B**

CROSS-CONNECTION TABLE		
<u>210</u>	<u>216</u>	<u>214</u>
<u>UPLINK INTERFACE:VPI:VCI</u> [UPLINK INTERFACE = Ifup = 1] [VPI0 ≤ VPI ≤ VPIIm] [VCI0 ≤ VCI ≤ VCIm] [p = number of ports per card] [c = number of cards in system]	STATUS	<u>BACKPLANE INTERFACE:VPI:VCI</u> [IF1 ≤ BACKPLANE INTERFACE ≤ IFc] [VPI0 = fixed starting VPI] [VCI0 fixed starting VCI] [p = number of ports per card] [c = number of cards in system]
IFup:VPI1:VCI1+p*(c-1)-2		IFc:VPI0+p-2:VCI1
IFup:VPI1:VCI1+p*(c-1)-1		IFc:VPI0+p-1:VCI1
IFup:VPIIm:VCIIm		IF1:VPI0:VCIc-1
IFup:VPIIm:VCIIm+1		IF1:VPI0+1:VCIc-1
IFup:VPIIm:VCIIm+p-2		IF1:VPI0+p-2:VCIc-1
IFup:VPIIm:VCIIm+p-1		IF1:VPI0+p-1:VCIc-1
IFup:VPIIm:VCIIm+p		IF2:VPI1/ VCIc-1
IFup:VPIIm:VCIIm+p+1		IF2:VPI2:VCIc-1
IFup:VPIIm:VCIIm+p*(c-2)		IF2:VPI0/ VCI0
IFup:VPIIm:VCIIm+p*(c-2)+1		IF2:VPI0+1:VCI0

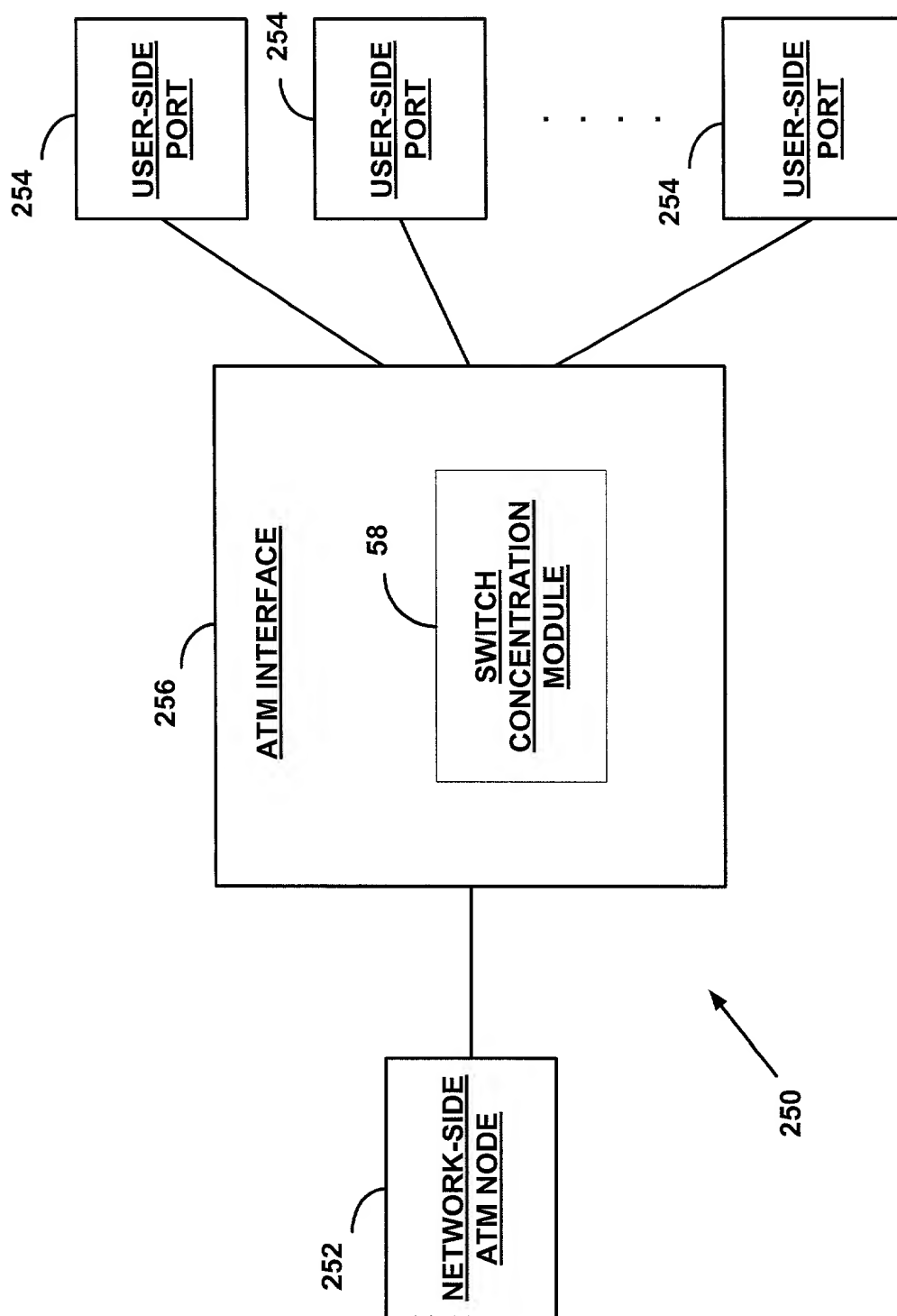
FIG. 14C

<u>220</u>	VCL VARIABLE	VALUE
<u>222</u>	IFINDEX	
<u>224</u>	VPI	
<u>226</u>	VCI	
<u>228</u>	TRAFFIC PROFILE UP	
<u>230</u>	TRAFFIC PROFILE DOWN	

**FIG. 15**

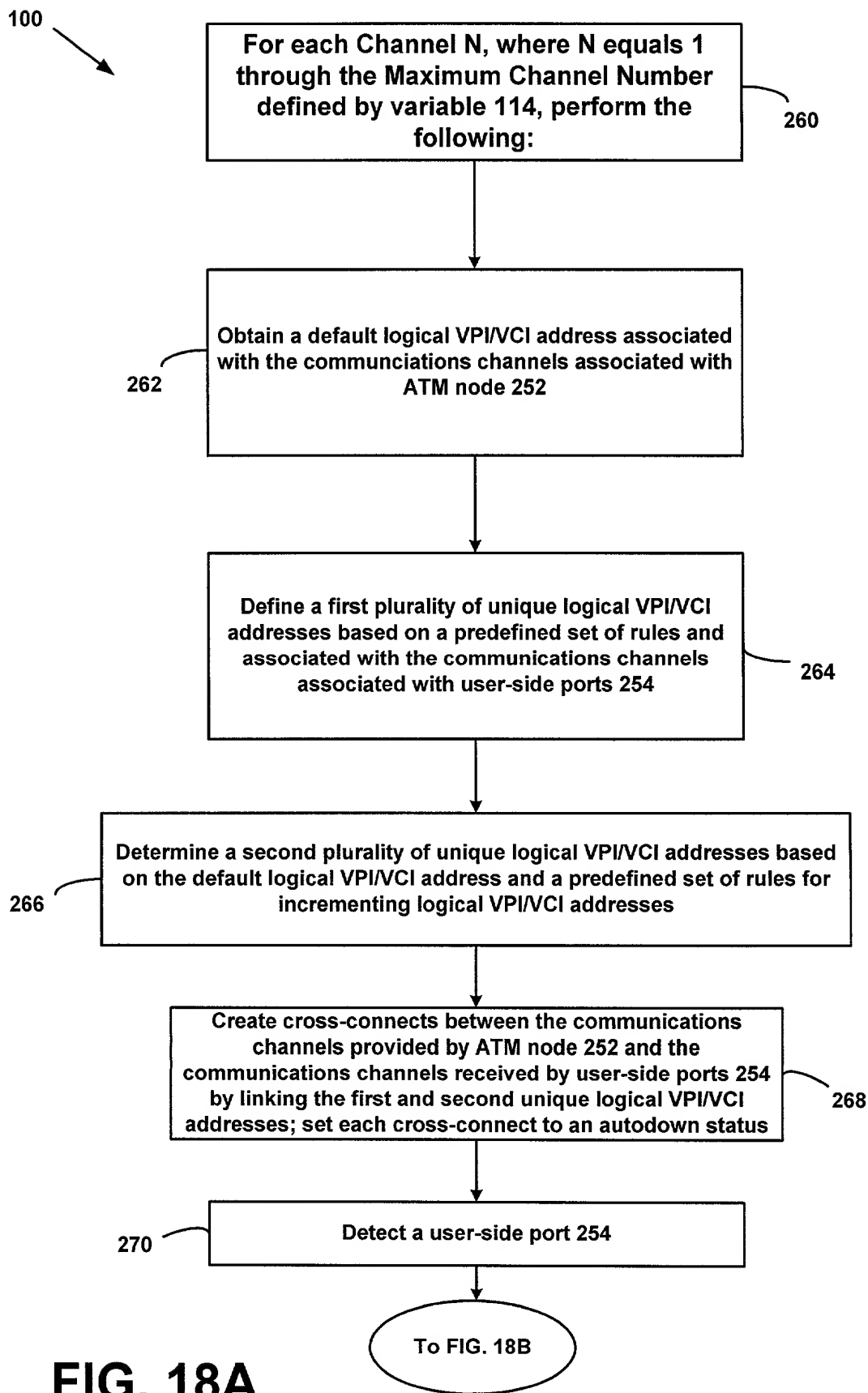
<u>232</u>	AUTO-CONFIGURATION RECORD	
	AUTO-CONFIGURATION VARIABLE	VALUE
<u>234</u>	INTERFACE ID	
<u>236</u>	CHANNEL	
<u>238</u>	BASE VPI	
<u>240</u>	BASE VCI	

**FIG. 16**



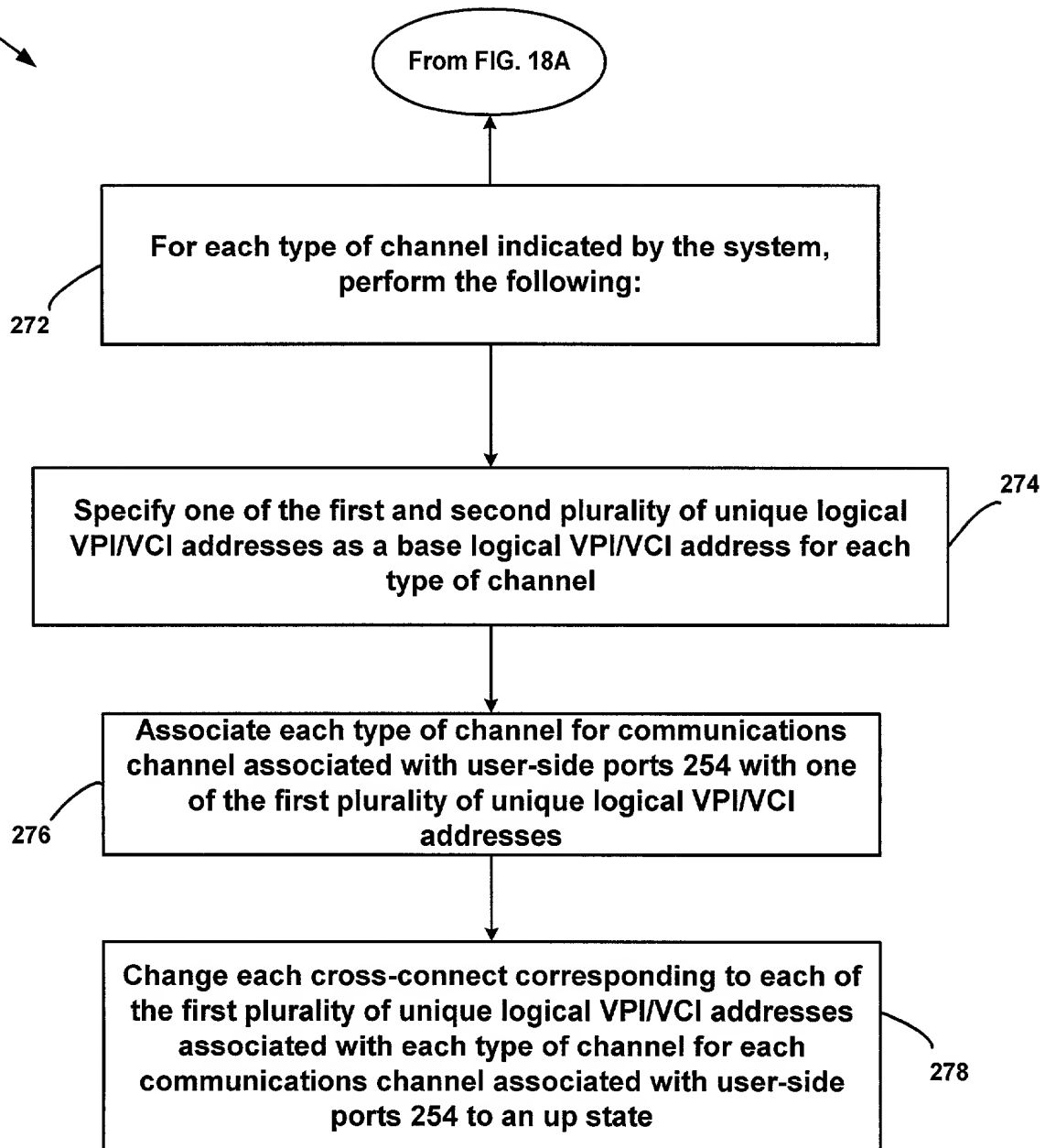
**FIG. 17**





**FIG. 18A**

100



**FIG. 18B**